

a sanitary wrapper. In certain embodiments, the kit comprises an above-described urinary catheter assembly, at least one antiseptic swab (e.g., Betadine, Povidone-Iodine), disposable gloves, a urine specimen container, and a tray capable of holding the aforesaid items. The tray is also capable of serving as a urine receptacle. The sanitary wrapper encloses all of the items in the kit.

[0017] In certain embodiments, the kit consists essentially of the aforementioned items. In certain embodiments, the kit specifically excludes one or more of the following items which are customary components of conventional catheterization trays: cotton balls, forceps, antiseptic liquid packet, lubricant gel packet, one or more drapes, and an absorbent sheet.

[0018] By employing an above-described improved sheathed catheter, and by eliminating several items of equipment from a conventional catheterization kit, decreased nursing catheterization time is required and the risk for urinary tract infection is uncompromised or reduced. These and other embodiments, features and potential advantages of the disclosed embodiments will become apparent with reference to the following description and drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0019] FIG. 1A is a side view of a sheathed catheter according to an embodiment of the invention.

[0020] FIG. 1B is a side view of the sheathed catheter of FIG. 1A, with the sheath partially recessed or drawn back exposing the catheter tip.

[0021] FIG. 1C is a side view of a sheathed catheter according to another embodiment of the invention, which includes an introducer that serves, together the sheath, to cover the insertable portion of the catheter.

[0022] FIG. 2 is a side view of a sheathed catheter according to another embodiment of the invention, having a free end that is outside the sheath.

[0023] FIG. 3 is a side view of a sheathed catheter according to one embodiment of the invention, having a sheath closure adjacent to the urine outlet of the catheter.

[0024] FIG. 4 is a side view of a sheathed catheter according to another embodiment of the invention, including a sheath closure similar to FIG. 1 with an attached extension or spout.

[0025] FIG. 5A is a side view of a sheathed catheter assembly including a urine collection receptacle.

[0026] FIG. 5B is a side view of another sheathed catheter assembly with attached urine collection receptacle.

[0027] FIG. 5C is a side view of an assembly similar to that of FIGS. 5A and 5B, in which the urine collection receptacle includes a urine outlet tube.

[0028] FIG. 6 shows the contents of a catheterization kit according to an embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0029] Referring to FIG. 1A, a sheathed catheter assembly 1a is shown. The assembly comprises a flexible catheter 10 comprising a urethra-insertable portion 20a and a portion

30a that is not insertable into the body of the patient. A pliable sheath 40a encloses all, or at least part of, the urethra-insertable portion 20a within lumen 41a, and has a terminus 42a attached to catheter 10 at an attachment point 12a between tip 14 and a second end 32 of the catheter. Second end 32 comprises a urine outlet 34. The urethra-insertable portion 20a commences at the tip end of the catheter 14, which contains one or more urine inlet(s) (16), and ends near sheath attachment point 12a on catheter 10, adjacent to the non-insertable portion 30a. The catheter 10 may be similar to any conventional flexible catheter, e.g., vinyl, red rubber latex, silicone elastomer. The urethra-insertable portion of the catheter is the length of catheter that may be appropriately inserted into the patient's urethra in order to perform a successful catheterization to drain the patient's urinary bladder. The actual length of the catheter, and the length of the insertable portion, will depend on the type of catheter used (e.g., adult or child size) and will also vary somewhat from one patient to another. The insertable portion may terminate at a flared or increased diameter portion 18 of the catheter, which includes end 32 and outlet 34. As a practical matter, the length of catheter available for insertion (insertable portion 20a) is decreased, at least to some extent, by the distance on the catheter that is required to accommodate the collapsed or compressed sheath at terminus 42a, when the catheter assembly is used for its intended purpose. As discussed below in the section titled "Catheterization Procedure," the sheath collapses or compresses as it is drawn back while advancing the catheter, during use of the assembly. Thus it can be readily appreciated that, in some configurations of the sheathed catheter assembly, less than all of the catheter that is protected by the sheath will actually be accessible and/or needed for insertion into the patient. Accordingly, the insertion stop location 26a (where the catheter stops at the urethral opening upon commencement of urine flow) may substantially coincide with attachment point 12a, or it may be spaced away from attachment point 12b closer to the tip 14. In some embodiments, part of the non-insertable portion of the catheter (e.g., flare 18) is also enclosed by the sheath, as shown in FIG. 3, for example.

[0030] The insertable portion 20a of the catheter is maintained in sterile condition inside the protective sheath, which may be similar to an elongated, thin plastic bag. The tip end of the catheter 14 may be initially (i.e., prior to using) fully enclosed by the sheath (FIG. 1A). The sheath may be initially closed and capable of being opened or ruptured so that the catheter tip can emerge from the sheath, when needed. In some embodiments, the sheath terminus 42a and attachment point 12a are positioned at the junction of the insertable and non-insertable portions of catheter 10. The non-insertable portion of the catheter preferably includes a "free end" that is outside of the sheath, as illustrated in FIGS. 1-5.

[0031] Referring now to FIG. 1B, an alternative assembly 1b is shown in which sheath 40b is initially open or partially open at terminus 44b. The sheath 40b may also be initially recessed, allowing the tip portion 14 (e.g., 1-2 inches) of catheter 10 to protrude from the sheath. In some applications, this configuration may be preferred over the otherwise similar assembly of FIG. 1A, to facilitate application of a lubricant.